

**REMARKS**

Claims 25-48 are all the claims pending in the application.

**I. Response to Rejection of Claims 25-48 Under 35 U.S.C. § 103(a)**

Claims 25-28, 30-32 and 40-48 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Spears et al. (US 6,455,148) in view of JP 1-108207.

In addition, claims 29 and 33-38 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Spears in view of JP 1-108207 in further view of Botros (US 2004/0116602).

Applicants respectfully traverse.

Claim 25 is directed to a metal laminate comprising between two outer metal sheets an adhesive polymer layer, characterised in that the adhesive polymer layer comprises cross-linked polyethylene or a copolymer thereof, simultaneously grafted with 0.1 to 2% by weight of the polymer composition of a silane compound and with 0.5 to 1.5% by weight of the polymer composition of an unsaturated carboxylic acid and/or a derivative thereof.

It is submitted that Spears is nonanalogous art.

To rely on a reference under 35 U.S.C. §103, it must be analogous art (see e.g. MPEP 2141.01(a)). Art is analogous art if (1) the art is from the same field of endeavor, regardless of the problem addressed, or (2) if the reference is not within the field of the inventor's endeavor, whether the reference is still reasonably pertinent to the particular problem with which the inventor is involved.

It is submitted that Spears is from the same field of endeavor. In the present case, the field of endeavor is the field of metal laminates, notably for the manufacture of automotive parts. Such laminates may undergo a subsequent forming step and cataphoresis step (see e.g., [0001] of the published application). A problem with which the inventor was concerned is

providing metal laminates which show sufficient heat resistance to allow high temperature treatments (see e.g. [0005] and [0013] of the published application) such as cataphoresis, which implies the exposure of the metal laminates to temperatures between 160 and 220°C (see e.g. [0008] of the published application).

In contrast, Spears concerns composite panels that are suitable for architectural and display applications, such as wall coverings and roofing (see e.g. col. 1, line 18). It is highly unlikely that these panels be exposed to temperatures between 160 and 220°C. The panels disclosed further comprise a plastic core that is made of foamed plastic such as polyethylene (see e.g. col. 3, line 28). In this respect, Applicants respectfully disagree with the Examiner's characterization that the rigid foam polyethylene layer referenced in column 3, lines 30+ should be understood as an additional layer. In fact, Spears clearly states that the plastic core layer (12) is a foamed plastic (see e.g. col. 3, line 28). In addition, the panels disclosed by Spears are different in structure and in function from the metal laminates claimed in the present application. Neither Figure 1 nor the description of Spears provide a basis for a different interpretation.

In addition, Spears is not reasonably pertinent to the particular problem with which the inventor is involved. As noted above, a particular problem addressed in the present invention is to provide metal laminates which exhibit heat resistance and that may be used at temperatures between -20 and 220°C (see e.g. [0013]). A specific problem dealt with in the present invention is notably a good adhesion resistance at a temperature of up to 220°C.

Spears relates to a composite panel that exhibits a higher strength to weight ratio than conventional panels and is not concerned with adhesion at high temperatures. Thus, it is submitted that Spears is not reasonably pertinent to the particular problem with which the inventor is involved.

For at least the foregoing reasons, it is submitted that Spears is nonanalogous art.

Even if Spears were considered to be analogous art, it is submitted there a person having ordinary skill in the art would not have had a reason to modify Spears in view of Harada. The Examiner asserts that that a person having ordinary skill in the art would have been motivated to adapt the panels of Spears by replacing the maleic anhydride-modified adhesive polyethylene resin with a polyolefin simultaneously grafted by silane and carboxylic acid disclosed in Harada to improve the impact resistance and workability of the composition.

Initially, Applicants have not been provided with a translation of Harada, and thus are simply not able to discuss the merits of the Examiner's position. In this regard, it is noted that there is no basis in the Abstract of Harada regarding improvement of impact resistance or workability of the composition. In fact, the Abstract indicates as the purpose of the invention to prevent an olefin polymer from decomposing when modified. Accordingly, the Examiner is kindly requested to provide an English translation of Harada if it is relied upon in any subsequent action and that the action should be made non-final.

In addition, as discussed above, the panels taught by Spear are intended to be used as wall covering or roofing and it is unlikely that they be exposed to high temperature. Further, there is no mention in Spear regarding a lack of bonding strength, which is contrary to sufficiency of bonding strength indicated for its intended use (see e.g. Abstract). Accordingly, a person having ordinary skill in the art would not have had any reason to modify Spear to increase, much less optimize the amount of grafts in order to obtain the desired degree of cross-linking, impact resistance and workability. Additionally, a person having ordinary skill in the art would not have a reason to combine Spears with Harada because Harada does not disclose that the modified olefin is able to be foamed into a foamed plastic as used by Spears.

For at least the foregoing reasons, it is submitted that a person having ordinary skill in the art would not have had a reason to modify Spears in view of Harada.

Moreover, *assuming arguendo*, even if a person having ordinary skill in the art modified Spears in view of Harada, the combination would not result in the claimed invention because Harada does not teach cross-linked polyethylene grafted simultaneously with silane and carboxylic acid.

The Examiner asserts that the polyethylene grafted simultaneously with silane and carboxylic acid would necessarily be cross-linked as cross-linking is said in the application to occur upon exposure to water or moisture.

It is submitted that the Abstract of Harada does not teach cross-linking the polyethylene as the polyolefin is grafted in absence of moisture, that is under an inert gas and in absence of a liquid medium. Therefore, considering for the sake of argument that Spears were analogous art and that a person having ordinary skill in the art would have had a reason to combine Spears with Harada, the combination would not result in the claimed invention as the polyethylene would not be cross-linked.

For at least the foregoing reasons, it is submitted that claim 25 is patentable over the cited art.

Moreover, claims 26-48 depend from claim 25, and thus is it respectfully submitted that these claims are patentable over the cited art for at least the same reasons as claim 25.

Accordingly, withdrawal of the rejections is respectfully requested.

## **II. Conclusion**

For the foregoing reasons, reconsideration and allowance of claims 25-48 is respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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**23373**

CUSTOMER NUMBER

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